

UNITED STATES PATENT AND TRADEMARK OFFICE

an

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,537		07/29/2003	Ray F. Campbell	BOE 0314 PA	1536
27256	7590	03/11/2005		EXAMINER	
ARTZ & A 28333 TELI	•		BELLAMY, TAMIKO D		
SUITE 250		165.	ART UNIT	PAPER NUMBER	
SOUTHFIE	LD, MI	48034	2856		
				DATE MAILED: 03/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summan		10/604,537	CAMPBELL ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Tamiko D. Bellamy	2856				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the o	correspondence address				
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed rs will be considered timely. Ithe mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 22 De	ecember 2004.					
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This	action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)⊠ 6)⊠ 7)⊠	Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) 15-20 is/are allowed. Claim(s) 1,2 and 7-10 is/are rejected. Claim(s) 3-6 and 11-14 is/are objected to.						
Applicat	ion Papers						
9)[7]	The specification is objected to by the Examine	r.					
,	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
,—	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	• •						
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		Patent Application (PTO-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 102

- 1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - A person shall be entitled to a patent unless -
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by van Seeters (5,283,528).

Re to claims 1 and 8, the preamble containing the words "single plate capacitor" holds not patentable weight with limitations of the claim. van Seeters discloses a fixed plate (11) within the housing (7,8). van Seeters discloses a movable plate (e.g. capacitive plate 15) parallel to fixed plate (20); and the movable plate (e.g., capacitive plate 15) is coupled to the housing (7,8) along at least one edge (e.g. spacing ring 9). van Seeters discloses a transimpedance amplifier (3) receiving the charge displacement capacitance signal (col. 5, lines 1-9).

Re to claim 2, as depicted in fig. 1, van Seeters discloses an analog-to digital converter (5) receives the scaled voltage signal.

Re to claim 7, as depicted in fig. 3, van Seeters discloses a movable plate (e.g., capacitance plate 15) comprising a flexible beam moving under acceleration with respect to fixed plate (11).

Re to claims 9 and 10, as depicted in figs. 3, van Seeters discloses gain adjusting the scaled voltage signal and generating a voltage differential signal.

Application/Control Number: 10/604,537 Page 3

Art Unit: 2856

3. Claims 1, 2, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by McBrien (4,987,779).

Re to claims 1 and 8, the preamble containing the words "single plate capacitor" holds not patentable weight with limitations of the claim. McBrien discloses a fixed plate (13) within the housing (e.g., combination of capacitor plates (11,12) and spacing bodies 19,20). McBrien discloses a movable plate (e.g. combination of hinge 17 and proof mass 18) parallel to fixed plate (13); and the movable plate (e.g., combination of hinge 17 and proof mass 18) is coupled to the housing (e.g., combination of capacitor plates (11,12) and spacing bodies 19,207,8) along at least one edge (e.g. connection portion 16). McBrien discloses a transimpedance amplifier (35) receiving the charge displacement capacitance signal (Col. 5, lines 41-49).

Re to claim 2, as depicted in fig. 1, as depicted in fig. 4, McBrien discloses an analogto digital converter (5) receives the scaled voltage signal (Col. 6, lines 62-68; Col.7, lines 1-15).

Re to claim 7, as depicted in fig. 3, McBrien discloses a movable plate (e.g., combination of hinge 17 and proof mass 18) comprising a flexible beam (e.g., hinge 17) moving under acceleration with respect to fixed plate (13).

Re to claims 9 and 10, as depicted in figs. 4, McBrien discloses gain adjusting the scaled voltage signal and generating a voltage differential signal.

Allowable Subject Matter

Application/Control Number: 10/604,537 Page 4

Art Unit: 2856

4. Claims 3-6, and 11-14 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

5. Claims 15-20 are allowed.

The following is an examiner's statement of reasons for allowance:

Re to claim 15, the independent claim includes "a linearizer receiving the integrated signal and generating a linearized acceleration signal "in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. Both van Seeters and McBrien teach generating an acceleration signal from a scaled voltage signal. Neither van Seeters nor McBrien teaches a linearizer receiving the integrated signal and generating a linearized acceleration signal.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Remarks

7. Applicant's arguments with respect to claims 1-3, and 7-11 have been considered but are moot in view of the new ground(s) of rejection. It is the examiners position that claims 1, 2, and 7-10 are not allowable over van Seeters, or over the newly applied art of McBrien.

Conclusion

Application/Control Number: 10/604,537

Art Unit: 2856

8. Any inquiry concerning this communication or earlier communications from the examiner

Page 5

should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The

examiner can normally be reached on Monday - Friday 7:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamiko Bellamy

March 7, 2005

HEZRÓN WILLIAMS

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800

Application/Control Number: 10/604,537

Art Unit: 2856

Page 6